

NHCRN

New Hampshire Career Resource Network

Your resource for Career
Development Information.

News

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Technologies for 2020

Technology experts at Battelle, a world renowned technology organization based in Columbus, Ohio, think they have 2020 vision. They don't mean perfect eyesight today. They're talking about the ability to see the world of 2020. They see a world of microscopic, cancer-eating machines, cloned human organs, designer foods, and computers everywhere-maybe even embedded in your clothes and under your skin.

Battelle's list of the ten most strategic technological trends that will shape our world over the next 20 years.

Genetic-based Medical and Health Care. Medical technology based in genetic research will allow detection and correction of many genetic-based diseases before they arise.

High-power energy packages. Developments such as highly advanced batteries, inexpensive fuel cells, and micro-generators of electricity will make many of our electronic products and appliances highly mobile.

GrinTech (Green Integrated Technology). Environmental concerns will be thrust to the forefront for consumers and industry. Technology will provide the answers, with new systems that eliminate rather than reduce waste.

Omnipresent Computing. Miniature, wireless, highly mobile, powerful,

and highly personalized computing with network access may first appear on the market as watches or jewelry and later be embedded in our clothing and possibly implanted under our skin.

Nanomachines. Microscopic machines, measured in atoms rather than millimeters, will revolutionize several industries and may perform a wide range of jobs for us-from heating our homes to curing cancer. Nanomachines could be used to deliver drugs to highly localized places in the body, to clean arteries, and to repair the heart, brain, and other organs without surgery. (Remember that science-fiction movie *Fantastic Voyage*?).

Personalized Public Transportation. New information technology in



your car will work with a central traffic control system to guide you through the quickest route to your destination.

Designer Foods and Crops. Grocery store shelves will be filled with genetically engineered foods that are environmentally friendly and highly nutritious. Nearly all cotton and wool for our clothing will also be genetically engineered. Even lawns could be genetically engineered to grow more slowly.

Intelligent Goods and Appliances. Advances in quantum computing will lead to smaller, more powerful computers and electronics that will add amazing intelligence to appliances and other products.

Worldwide Inexpensive and Safe Water. Before water shortages become critical, technology will answer the challenge, with advanced filtering, processing, and delivery of potable water.

Super Senses. Using sensors and electronic or genetic technology, we will be able to implant devices that will allow us to hear better than ever before or see farther or in the dark.

Source: Battelle Memorial Institute
www.battelle.org/forecasts/

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Provided by the New Hampshire Career Resource Network (NHCRN) within the Department of Employment Security's Economic and Labor Market Information Bureau.



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New Hampshire Career Resource Network - Your resource for career development information.

Construction Careers

The construction industry is the biggest industry in the nation. It accounts for more than \$800 billion annual in the United States. Nearly 5 million men and women are employed in this industry. In the years to come even more will be needed.

Career opportunities are nearly unlimited in the construction industry. There are many different jobs for many different people. Each has its own advantages, responsibilities, and rewards for those who are qualified. Salaries are flexible, they depend on you; your abilities, effort, initiative, and dedication are the major factors. Some construction careers require specialized training, while others require a broad understanding of the total project, gained only after years of experience.

Construction is truly an industry where men and women can start at the bottom and work their way to the top.

Construction company owners often begin their careers in the trades. Because of the physical labor associated with the industry, many once believed it was a "man's world", but modern technology and changing attitudes have created exciting opportunities for men and women. With training and experience, construction employees can move steadily along a career path, learning while they earn a great living.



Whatever construction career you choose, you will need the well-rounded educational background offered in your public school system. By choosing your courses wisely, you can get a head start on concepts you will use when you join the workforce. Should you choose to go on to college, the knowledge you learn now will be the foundation for more advanced courses to build on.

CONFERENCE HEADS TOGETHER'03

Talking about what works best to keep New Hampshire kids in school.

When: Jan 28, 2003

Registration 8:00-9:00

Program 9:00-4:00

Where: Courtyard by Marriott-Grappone Conference Center, Concord, NH

See www.nhworks.org (Breaking News) for additional information and registration form or call (603) 229-3305.

Sponsored by Workforce Opportunity Council and Department of Education.

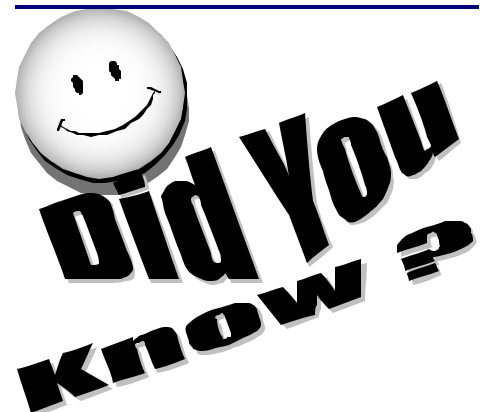
Educational Requirements for Construction Careers

Some of the educational requirements for all fields within the construction industry:

- ☐ **COMMUNICATIONS**--All the career paths require your ability to read and comprehend what you read. You must be able to communicate both in written form and verbally. In addition to basic English courses offered, we suggest you elect a public speaking course.
- ☐ **MATHEMATICS**--You must be proficient in basic math in order to succeed in the construction industry. If you choose the field of engineering as a career, you should master the advanced math curriculum in addition to basic math.
- ☐ **SCIENCE**--As a supplement to the basic science knowledge learned in high school, you will find it helpful to gain an understanding of the physical sciences, particularly if you have chosen engineering as a career.
- ☐ **BUSINESS**--All basic business courses will be useful in the construction fields. Should you choose accounting/financing as your career, take all the business courses offered.
- ☐ **ART**--If you choose architecture as your career you will find art courses helpful. Some colleges require a portfolio as part of their entrance requirement.
- ☐ **DRAFTING**--If your school offers design/drafting courses, take them. You'll need the background for surveying, land planning, architecture and engineering.
- ☐ **VOCATIONAL EDUCATION**--Building trade courses can give you some valuable "hands on" knowledge to help you learn basic field skills.

These are basic guidelines; the guidance counselor can always help the student with specific course/career planning. The most important thing to remember is that whether or not students plan to go to college, they need a high school education. For additional information, contact:

NH Construction Careers Council
c/o NH Good Roads Association
261 Sheep Davis Road, Suite 5
Concord, NH 03301
(603) 224-1823.



According to the U.S. Census Bureau, New Hampshire's population is 49.2% male and 50.8% female-the US population is 49.1% male and 50.9% female.

There are 8,968 square miles of land in New Hampshire and 137.8 people per each square mile.

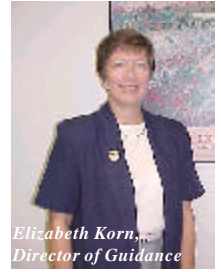
U.S. Census Bureau

Of the New England states, New Hampshire population grew the most from 1990-2000 with an 11.4% increase. Vermont-8.2%; Massachusetts-5.5%; Rhode Island-4.5%; Maine-3.8%; Connecticut-3.6%

U.S. Census Bureau

Who's Doing What?

In the Nashua School District, the role of the school counselor is to support the K-12 School Counseling Program by



Elizabeth Korn,
Director of Guidance

facilitating student development in academic, career, and personal/social areas. The school counselor is a trained and certified professional who works with students, administrators, teachers, parents, and the community to promote a safe and successful learning environment. School counselors assist all students within the total educational program to become effective learners, responsible citizens, and contributing members of society. On-going communication and information exchange with parents/guardians are vital to all aspects of the School Counseling Program and is a key part of the counselor's role. Further, school counselors advocate and educate the public as to the role of the professional school counselor.

To help all students to achieve their potential, elementary school counselors foster excellence through their work in the four areas of the School Counseling Program. Counselors coordinate the implementation of the guidance curriculum through classroom lessons to help students in the areas of academic, personal/social, and career development. Individual planning is provided to help students identify their skills, abilities, achievements, and interests through guidance and counseling activities and interpretation of assessments (i.e. NHEIAP). Through responsive services, counselors conduct individual and small group counseling sessions and consult with teachers, administration, school psychologists, school social workers, outside agencies, and social services concerning the welfare of the students. Counselors make referrals for special services for students and families within the school and community.

The elementary school counselor provides system support to the school by planning and coordinating activities with school, community, and business

resources to support school programs.

The counselor provides information on parenting the elementary school child and plays a key role in helping students and parents make the transition to middle school.

The middle school counselor provides a comprehensive School Counseling Program that focuses on the uniqueness of all students. Transition is the key word during this time, and counselors address the physical, psychological, and educational changes that occur as students journey from childhood to adolescence. Middle school counselors assist students with self-understanding; interpersonal, decision-making, conflict resolution skills; and career planning through the guidance curriculum. By gathering information for individual planning regarding a student's academic and emotional needs, the middle school counselor serves as a consultant to teachers and parents to create a connection between home and school. Responsive services are provided through individual and small group counseling. In the community, the middle school counselor acts as a liaison between school, educational agencies and social services. The counselor also provides system support through collaboration with administration, staff, business, and the community in order to prepare students for the transition to high school.

The high school counselor provides informational services in the areas of education, careers, and personal-social development through the guidance curriculum. Current information on careers and post-secondary opportunities, gathered through networking with schools and the community, is used in individual planning with students to help them prepare for their transition to the post-secondary level. The high school counselor

assists in providing interpretation of assessment results to students and parents regarding abilities, achievement, interests, and learning styles. Responsive services are delivered through individual and group counseling sessions, and referrals to community support services are made, when needed. Further, the high school counselor provides system support by coordinating programs and serving as a resource consultant to school personnel, students, parents, and community agencies. Through leadership and collaboration, the high school counselor engages in self and program evaluation.

Elizabeth Korn,
Director of Guidance
Nashua HS North

**Tell
Others
What
YOU
Are
Doing!**

**Send us your story
about what you have
done/are doing/will
be doing/are thinking
about doing to FAX:**

**(603)228-4172 or email me
rricker@nhes.state.nh.us**

**(my preference) or, the
"good ole' fashioned way"
mailing address:**

**New Hampshire Career
Resource Network, NHES,
32 South Main Street,
Concord, NH 03301.**

**here!
We'll print it**

Career Development Web Sites To Check Out

Know a good site - let me know so we can share with your fellow professionals.

America's Job Bank – search a nationwide listing

www.acinet.org

America's CareerInfo Net – labor market and career information both nationwide and by state

www.alx.org

Federal Jobs Central – information on jobs with the federal government

www.fedjobs.com

Career Mosaic – commercial job and career site

www.careermosaic.com

Career Path - commercial job and career site

www.careerpath.com

The Employment Guide's Career Web – commercial job and career site

www.cweb.com

Jobweb - commercial job and career site maintained by the National Association of Colleges and Employers

www.jobweb.org

Monster Board – commercial job and career site

www.monster.com

The Riley Guide – employment opportunities and resources

www.rileyguide.com

Occupational Outlook Handbook – career information from the Bureau of Labor Statistics

stats.bls.gov.ocohome.htm

Employment and Training Administration – job and career

information

www.doleta.gov/individ.htm

National Center for Education Statistics – College Opportunities On-Line

www.nces.ed.gov/ipeds/cool

The College Board – information on colleges, testing, and more

www.collegeboard.org

NH Future - Post entry-level job openings

www.NHFuture.net

Peterson's – the popular print guide to colleges on-line

www.petersons.com

Embark – college information such as schools, scholarships, distance learning, testing, and more

www.embark.com

College Net – college information such as schools, scholarships, distance learning, testing, and more

www.collegenet.com

Job Corps NE – information about New England's Job Corps Program

www.NEJobCorps.org

School-to-Work – information about national school-to-work programs

www.stw.ed.gov

Educational Resources Information Center (ERIC) – research materials on topics such as career development, conflict resolution, and achievement

www.uncg.edu/edu/ericcass/libhome.htm

New Hampshire Career Resource Network – career development information www.state.nh.us/elmi/nhcrn/index.htm

New Hampshire Employment Security – job opportunities & labor market information www.state.nh.us/elmi/index.html.

NHCRN

Inside

Conference Info

Important

Please note any changes to your address below.

Address Service Requested

Concord NH 03301-4857

32 S Main St

ELMI, New Hampshire Employment Security

NEW HAMPSHIRE CAREER RESOURCE NETWORK